

ABSTRACT OF THE DISCLOSURE

Myc protein is an unevenly distributed intermediate agent for cell proliferation, and activates a gene expression via E.box. Mina 53 gene encodes a protein of 53 kDa molecular weight and is present in the nucleoplasm and nucleolus. Mina 53 mRNA and protein expression are induced by artificial introduction of c-Myc activity. E.box site is present in the vicinity of the transcription initiation site of mina 53 gene, and the expression from mina 53 promoter is activated by the c-Myc through the medium of E.box. Specific inhibition of the mina 53 expression in HeLa cells and rat fibroblast cells 3Y1 having high expression c.myc strikingly inhibited the cell proliferation. Combination of these results shows that the mina 53 is a Myc target gene and is associated with the cell proliferation of mammal.